

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

DIBA Industries Inc.

Connecticut State Technology Extension Program

Diba Industries Exceeds Goals with Lean

Client Profile:

Diba Industries, founded in 1986, specializes in providing custom solutions for fluid handling systems. The company is a leading supplier of specialty components, precision grade tubing, tubing assemblies and complete subassemblies for fluid transfer applications. Their products serve the analytical, diagnostic, scientific, medical and industrial instrumentation markets. Diba designs and manufactures custom fluid handling systems according to their customer's specifications. Products include medical and surgical instruments, liquid level sensors, tubing assemblies and custom fittings, fluid heaters, and bottles cap assemblies. The company employs 100 people at its facility in Danbury, Connecticut.

Situation:

Diba Industries made the strategic decision to revise its approach, knowledge and application of Lean Manufacturing. The company's Quality Assurance Manager, Christine Pompa, volunteered to become the Lean Champion and enrolled in the Connecticut State Technology Extension Program's (CONNSTEP), a NIST MEP network affiliate, Continuous Improvement Champion Certification (CICC) program to help move the company forward on its Lean journey.

Standardizing product processing is challenging for a custom design manufacturer. However, Christine had several ideas for the CICC class project and selected Diba's Thermoform cell where the biggest bottleneck existed. The team goal was to reduce total lead time by 10 percent, focusing on the non-value added time in the process.

Solution:

Pompa obtained strong support from each department and then organized a cross-functional team. To eliminate bottlenecks, the team limited work in progress, (WIP), reorganized the cell into teams, and reduced distance traveled by combining two stations into one. The team also developed a Kanban system for raw material, reducing the four week lead time. Pompa found that creating a team environment within the cell was one of the greater challenges of the project due to the resistance to change exhibited by the cell team members.

Once the Thermoform cell was under control, Pompa moved on to the largest assembly department at Diba and applied the same concepts to reduce lead time and create three distinct cells. Six months after the CICC program completion, Pompa and her team completed continuous improvement processes on the second project. During this timeframe, Pompa completed CONNSTEP's Lean Facilitator & Trainer Certification Program which uses a combination of classroom training and group exercises in a team based environment, providing the materials needed to develop the Lean facilitator skill set.

Results:

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- * Reduced lead time by 75 percent, from 6.3 days to 1.2 days.
- * Reduced inventory from 1,438 pieces to 287 pieces.
- * Reduced distance traveled from 315 steps in two stations to 160 steps in one station.

Testimonial:

"The greatest strength in our relationship with CONNSTEP has been its training and support of my professional development skills. CONNSTEP's support has been paramount to move the culture change forward at Diba. I am excited about the opportunities for change and improvement, and I thank CONNSTEP for helping us champion the effort."

Christine Pompa, Quality Assurance Manager